TABLE A-17

Quality Control Acceptance Criteria for Method E310.1 — Total Alkalinity

RL - Water = 10 mg/L
Accuracy Water (% R) = 75 - 125
Precision Water (RPD) = ±20

QC Check	Minimum Frequency	Acceptance Criteria	Corrective Action [a]	Flagging Criteria [b]
Titrant standardization	Daily (prior to sample analysis)	None	None	None
Method Blank	One per preparation and analytical batch	<RL	Correct problem then reprep and analyze method blank and all samples processed with the contaminated blank	Apply U to all results for the specific analyte(s) in all samples in the associated analytical batch whose concentration is less than 5 times the blank concentration.
Laboratory Control Sample (LCS)	One per preparation and analytical batch	80-120 % recovery	Correct problem then reprep and analyze the LCS and all samples in the affected analytical batch	For specific analyte(s) in all samples in the associated analytical batch: if the LCS %R > UCL, apply J to all positive results if the LCS %R < LCL, apply J to all positive results, apply UJ to all non-detects. If LCS <50%, R flag results.
MS/MSD	One MS/MSD per every 40 samples.	75-125% recovery and RPD <20%	None	Flagging to be based on site information and reviewer's judgement. Recommended flags are J for positive results and UJ for non-detects.
MDL study	Once per year	Detection limits established shall be < the RLs in this table.	None	Apply R to all results for the specific analyte(s) in all samples analyzed

[a] All corrective actions associated with project work shall be documented, and all records shall be maintained by the laboratory.

[b] Flagging criteria are applied when acceptance criteria were not met and corrective action was not successful or corrective action was not performed.